

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

- › [ACEMAGICIAN](#) /
- › [ACEMAGICIAN M1A Pro Mini PC User Manual](#)

ACEMAGICIAN M1A Pro

ACEMAGICIAN M1A Pro Mini PC User Manual

Model: M1A Pro

1. INTRODUCTION

This manual provides essential information for setting up, operating, maintaining, and troubleshooting your ACEMAGICIAN M1A Pro Mini PC. Please read this guide thoroughly before using the device to ensure proper functionality and longevity.

2. PACKAGE CONTENTS

Verify that all items are present in the package:

- ACEMAGICIAN M1A Pro Mini PC
- Power Adapter
- HDMI Cable
- User Manual (this document)
- VESA Mount (optional, may be included)

3. PRODUCT OVERVIEW

3.1 Front and Rear Panel Layout

Familiarize yourself with the ports and indicators on your Mini PC.

STORM 3.0 RAPID COOLING HEAT DISSIPATION ARCHITECTURE

3 independent cooling systems with oversized air intake and exhaust ports rapidly dissipate heat, ensuring full performance delivery, eliminating thermal bottlenecks, and comprehensively enhancing cooling capabilities.

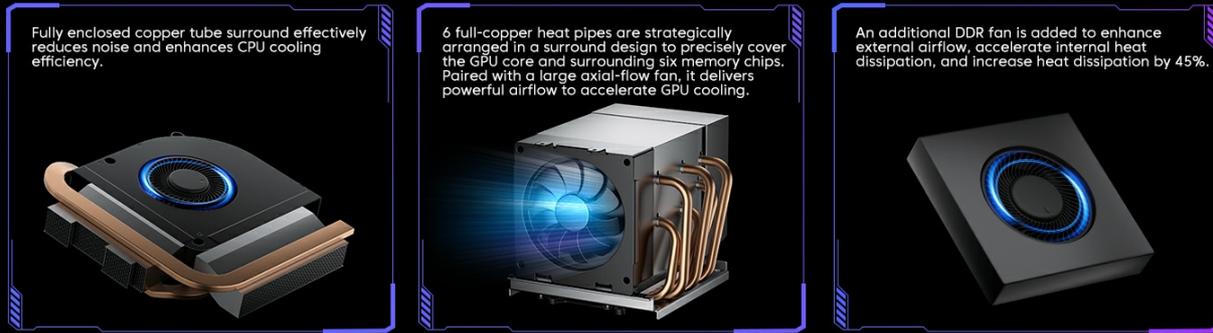


Image: Front and rear panel port diagram. The front panel includes a power button, USB 3.2 Gen2 Type-A port, 3.5mm audio jack, SD card slot, and a USB-C port. The rear panel features a DC power input, DP 1.4 ports, 2.5G Gigabit Ethernet port, HDMI 2.0 ports, USB 3.2 Gen2 Type-A port, and USB 3.1 Gen1 Type-A ports.

3.2 Key Features

- **Processor:** Intel Core i9-13900HK (14 Cores / 20 Threads, up to 5.4GHz)
- **Graphics:** Discrete Intel ARC A770 GPU with 16GB GDDR6
- **Memory:** Dual-channel DDR5 RAM, expandable up to 96GB (5200MHz)
- **Storage:** M.2 NVMe PCIe 4.0 SSD, expandable up to 4TB
- **Operating System:** Windows 11 Pro
- **Connectivity:** USB4 Type-C, DP 2.0, HDMI 2.0, WiFi 6E, Bluetooth 5.2, 2.5GbE LAN
- **Cooling:** Storm 3.0 Rapid Cooling Heat Dissipation Architecture

4. SETUP GUIDE

4.1 Connecting Peripherals

1. **Connect Display:** Use an HDMI or DisplayPort cable to connect your monitor(s) to the corresponding ports on the rear of the Mini PC. The device supports up to four displays simultaneously.
2. **Connect Keyboard and Mouse:** Plug your USB keyboard and mouse into any available USB ports.
3. **Connect Network:** For a wired connection, connect an Ethernet cable from your router/modem to the 2.5GbE LAN port on the rear. For wireless, ensure your Wi-Fi network is available during initial setup.
4. **Connect Power:** Plug the power adapter into the DC IN port on the rear of the Mini PC, then plug the adapter into a power outlet.

4.2 Initial Power On

1. Press the Power Button located on the front panel of the Mini PC.
2. The system will boot up and guide you through the Windows 11 Out-Of-Box Experience (OOBE) setup. Follow the on-screen instructions to configure your operating system, network, and user accounts.
3. Ensure all necessary drivers are installed. Windows Update typically handles this automatically.

5. OPERATING INSTRUCTIONS

5.1 Performance Modes

The Mini PC features three adjustable performance modes to optimize for different usage scenarios:



Image: Three Speed Mode Switching. This diagram shows the Energy Saving mode (limits temperature and fan noise), Daily Use mode (achieves a balance between performance and noise), and High Performance (Beast Mode) (removes restraints for maximum performance).

- **Energy Saving Mode:** Limits CPU power consumption for reduced fan noise and lower power usage. Ideal for light tasks and extended idle periods.
- **Daily Use Mode:** Balances performance and noise for everyday computing tasks, offering a comfortable user experience.
- **Beast Mode (High Performance):** Unlocks full CPU and GPU potential, suitable for demanding applications such as AI processing, rendering, and gaming. This mode may result in increased fan noise and heat output.

Refer to your operating system's power settings or manufacturer-provided software for switching between these modes.

5.2 Multi-Display Setup

The M1A Pro supports up to four independent displays, allowing for an expansive workspace. Connect your monitors using the available HDMI and DisplayPort outputs.



Image: A desk setup featuring the ACEMAGICIAN M1A Pro Mini PC connected to three monitors and a tablet, demonstrating its quad-screen display capability.

After connecting, configure your display settings within Windows 11 (Right-click on desktop > Display settings) to extend or duplicate your desktop across multiple screens.

5.3 AI and Gaming Applications

The integrated Intel Core i9-13900HK processor and discrete Intel ARC A770 GPU provide robust performance for demanding applications, including:

- AI computing and machine learning tasks (e.g., Stable Diffusion)
- Video editing and rendering (e.g., Premiere Pro, Blender)
- Virtualization and code compilation
- Modern gaming titles



Image: On-Device Intelligence. The Mini PC is shown with logos of AI applications like ChatGPT, Google AI, Midjourney, Deepseek, Llama, and Qwen, indicating its capability for LLM inference.

6. MAINTENANCE AND UPGRADES

6.1 Cleaning and Airflow

To maintain optimal performance and prevent overheating, ensure the Mini PC's ventilation openings are clear of dust and obstructions. Regularly clean the exterior with a soft, dry cloth. Avoid spraying liquids directly onto the device.

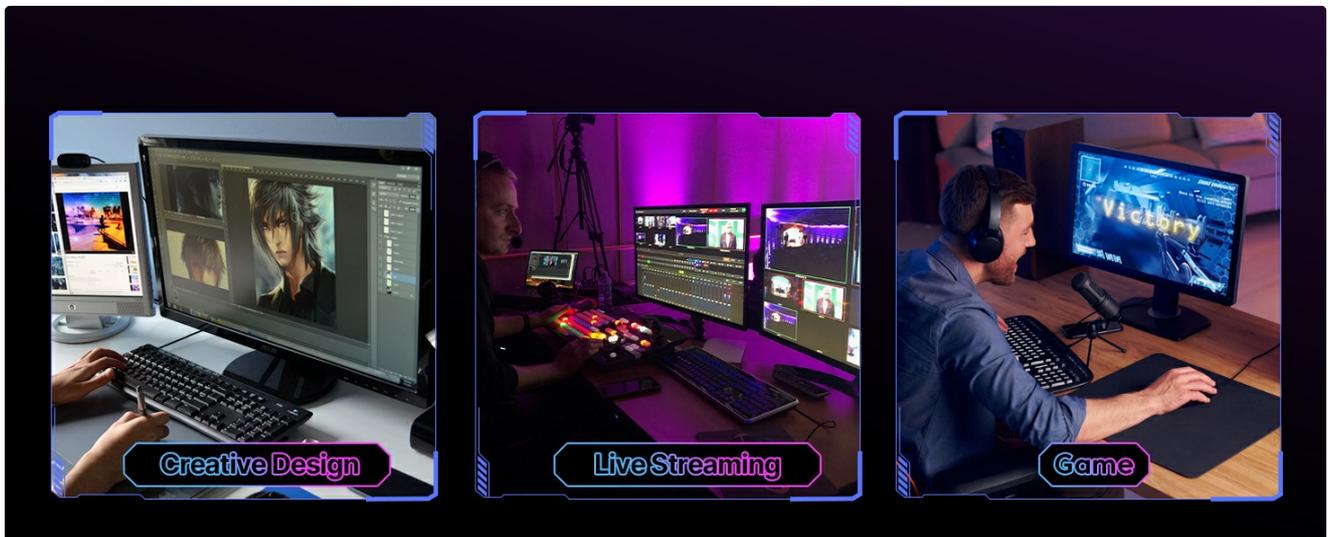


Image: Storm 3.0 Rapid Cooling Heat Dissipation Architecture. This diagram details the cooling system, including fully enclosed copper tubes, six full-copper heat pipes with an axial-flow fan, and an additional DDR fan for enhanced heat dissipation.

6.2 Memory (RAM) Upgrade

The Mini PC supports dual-channel DDR5 RAM and can be upgraded up to 96GB. To upgrade:

1. Power off the device and disconnect all cables.
2. Carefully open the chassis (refer to specific instructions or diagrams if provided with your unit for chassis access).
3. Locate the DDR5 SO-DIMM slots.
4. Gently press the clips on both sides of the existing RAM module to release it. Insert new modules at an angle and press down until the clips secure them.

5. Close the chassis and reconnect cables.

6.3 Storage (SSD) Upgrade

The Mini PC includes M.2 NVMe PCIe 4.0 slots, supporting up to 4TB SSDs. To upgrade or add storage:

1. Power off the device and disconnect all cables.
2. Carefully open the chassis.
3. Locate the M.2 slots.
4. Insert the new M.2 SSD into the slot at an angle and secure it with the provided screw.
5. Close the chassis and reconnect cables.



Image: Internal view highlighting DDR5 memory and M.2 NVMe PCIe 4.0 SSD slots, indicating upgrade capabilities.

7. TROUBLESHOOTING

This section addresses common issues you might encounter.

7.1 No Power / System Not Starting

- Ensure the power adapter is securely connected to both the Mini PC and a working power outlet.
- Verify the power outlet is functional by plugging in another device.
- Check the power adapter for any visible damage.

7.2 No Display Output

- Confirm that the display cable (HDMI/DP) is securely connected to both the Mini PC and the monitor.
- Ensure the monitor is powered on and set to the correct input source.
- Try a different display cable or monitor if available.

7.3 Fan Noise / Overheating

- Ensure the Mini PC's ventilation openings are not blocked.
- Check the selected performance mode. "Beast Mode" will naturally generate more heat and fan noise. Consider switching to "Daily Use" or "Energy Saving" for quieter operation.
- Dust accumulation can impede cooling. Refer to the maintenance section for cleaning instructions.

7.4 Wi-Fi / Bluetooth Connectivity Issues

- Ensure Wi-Fi and Bluetooth are enabled in Windows settings.
- Restart your router/modem.
- Update wireless drivers through Windows Update or the manufacturer's website.
- If Wi-Fi performance is consistently poor, consider using a wired Ethernet connection.

7.5 System Enters Sleep/Hibernation Unexpectedly

- Check your Windows Power & Sleep settings. Navigate to **Settings > System > Power & battery > Screen and sleep** to adjust when the device goes to sleep.
- For hibernation settings, search for "Edit power plan" in the Windows search bar, then click "Change advanced power settings" and adjust hibernation timers.

8. SPECIFICATIONS

Feature	Specification
Processor	Intel Core i9-13900HK (14 Cores/20 Threads, up to 5.4GHz)
Graphics	Intel ARC A770 MXM (16GB GDDR6)
RAM	DDR5 (5200MHz), expandable up to 96GB
Storage	M.2 NVMe PCIe 4.0 SSD, expandable up to 4TB
Operating System	Windows 11 Pro
Video Output	2x DP 2.0 (8K@60Hz), 2x HDMI 2.0 (8K@60Hz), 1x USB4 Type-C (8K@60Hz)
USB Ports	1x USB4 Type-C (40Gbps), 1x USB 3.2 Gen2 Type-A, 4x USB 3.2 Gen1 Type-A
Network	2.5GbE LAN, WiFi 6E, Bluetooth 5.2
Audio	3.5mm Audio Jack
Card Reader	SD Card Slot
Dimensions (L x W x H)	166.7 x 166.9 x 160.9 mm
Weight	Approximately 4.26 kg (9.39 lbs)

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official ACEMAGICIAN website. Keep your proof of purchase for warranty claims.

